January 18, 2005

Wetland Rapid Assessment Meeting

General Comments about Conducting Wetland Rapid Assessments

1) We need a good training program before we send staff in the field with these forms.
2) Require the assessors to walk the entire wetland and to take photos before filling out the assessment form
3) Include an example data sheet that is filled out and site photos for training.
4) For location use NAD 27 and UTM coordinates because they are easier to interpret in the field and are on the topo maps.

Form Format

1) Keep the form simple and short. Do not have blank pages. Do not make calculations in the field. Eliminate information that can be added in the office (e.g., HUC).
2) When possible, use a PDA instead of field forms.
3) Put all scores in separate boxes. Do not include with the text. Number the questions.
4) Record all photos at one location on the worksheet.
5) Only have one category at the end to rank overwhelming stressors.

Form Content

1) Limit assessments to observations. Professionals should conduct all interpretations
2) Cause and effects: Consider keeping the evaluation of stressors separate from the evaluation of impacts (e.g., buffer impacted by stressor, buffer condition, presence of dams, etc all evaluate the presence of stressors…not condition).
3) Eliminate the questions about trends or just make comments about the trends. Trends are too difficult to answer with one field visit.
4) Consider include 2 scores: Potential and Actual. The ratio between the two would produce the rating.
5) We need to have a question to discuss if the wetland is converted to another type. For example, a riverine wetland may be converted to a lacustrine by flooding with a dam. We need to state what wetland type we are considering as reference or potential for the assessment (riverine or lacustrine?)
6) Consider including a question that addresses soils. Soil is one of the main 3 criteria for determining “jurisdictional” wetlands.

Summary of Rating

1) Instead of assigning ratings of excellent, fair, good and poor based on points: leave this determination to the professional analyst. At least include a disclaimer.
2) Note when there are "overwhelming" stressors. Need a process where one bad variable (e.g. water quality or hydrologic alteration) can toss the entire system into a "problem" category.
3) Invasive species (e.g. extensive noxious weeds) should be considered a stressor.

User Guide / Instructions

1) The user guide should answer the following questions:
    a. Why did we choose a specific variable?
    b. Why is it a good indicator for assessing wetland condition and to meet the goals of the CWA.
    c. What is the science behind the various fields, categories and scores?
    d. How did we come up with the scores?
    e. How did we establish category breaks?
    f. Do all fields with a similar score pose a similar threat to wetland function or condition?
    g. Is their research that shows a variable rated 5 is twice as bad as one rated 10?
    h. For the final rating, how were the weights established? For example why is water quality given the least weight?

Wetland Type /Site Characterization:

1) Temporary, seasonal, semi-permanent and permanent depressional wetlands are difficult to determine with one site visit.
2) Incorporate MDT protocols for determining wetland assessment areas
3) Include beaver pond as a subcategory for riverine
4) Do not specify 20 cm organic matter for fen. Rather use qualitative terms (e.g., wetland is bouncy).
5) To shorten the form, just circle the amphibian and reptile species that are observed.
6) Identify fish species when possible

Site Maps

1) Create a legend for site map
2) Provide a prompt to indicate where each photo is taken
3) Make it clear that the buffer area is 100 meters on the site map
4) Record the percent and area of emergent vegetation
5) Use a compass to draw site maps so North is accurate
7) Record the size of the wetland (Length X Width)

Water Quality Condition Assessment

1) Keep Buffer penetrated (stressor) separate from impacts.
2) Limit "buffer penetrated by stressor" to the top three stressors
3) Cattle feces should be listed as a nutrient indicator
4) Change "evidence of contamination" to evidence of surface oils, excess foaming…..
5) Sediment/toxic question deals with two different issues. Make into two questions.
6) Include a statement that we should not lower the score if oil sheen is from vegetation decomposition.
7) For scoring only use the average of the lowest 2 scores.

Hydrogeomorphology Condition Assessment

1) Beaver activity will have major impact on sediment supply and downcutting. It is difficult to assess beaver ponds. Should we avoid beaver pond complexes on only focus on the riverine systems instead?
2) Consider including a simplified version of NRCS questions 4 and 5 (stability rating / deep binding root mass) for riverine wetlands.
3) We should include the assessment of both "percent" and "degree" of hummocking and then combine the results.
4) The question on bare ground should ask what percent of emergent vegetation is impacted by trampling or other human-caused disturbances. Don't include open water or hummocking.

Buffer Condition

1) Include grazing in buffer area (non apparent, light, moderate, severe)
2) Include nonnative vegetation in buffer area. Express same as invasive species.
3) Describe slope of lands surrounding wetlands because steeper slopes are more susceptible to erosion and runoff. (3-4 categories). Consider using to adjust the score.
4) Include recreational activities (e.g., campgrounds) with row crops, residential or clearcuts.
5) Add a score of 10 if the roads are >100 meters from the wetland.
6) Keep the assessment of the buffer (threats and stressors) separate from the assessment of ecological function/condition or impact.

Vegetation Condition Assessment

1) Simplify Assessment. Consider incorporating NRCS questions 6-9 to assess vegetation condition. Simplify the NRCS questions where necessary.
2) Use simpler photos in the guidebook for shrub architecture (See NRCS Riparian Assessment form).
3) Re-word Shrub architecture and question. Consider replacing with NRCS riparian assessment questions.
4) Have separate questions for noxious weeds and undesirable plants (See NRCS riparian Assessment form)
5) Instead of using % cover, be qualitative and use (none present, a few, moderate, abundant, extensive). Provide descriptions in the instructions.
6) Need vegetation key with photos and vouchers.
7) Emphasize that vegetation should only be assessed within the assessment unit. Need better description of Assessment Unit. Especially for depressional sites.
8) For tall shrubs include a prompt that states we should skip this session if the site does not have the potential for shrubs.
9) For the invasive species list we should change the format to rank the most common vegetation instead of listing them. For Example: 3 Reed canarygrass.
10) Include a question that evaluate aquatic vegetation (Exotics vs Natives) and develop an aquatic plant key.
11) Separate scoring for dead wood and unhealthy vegetation.
12) Determine when to assess the age class of tree communities. Only consider when trees are the dominant community?

Restorability

1) It is difficult to assess grazing intensity in the field with only one visit
2) Category one should include "no observed impacts".
3) Separate statements within each category so evaluators can check off which one they are considering.
4) Must consider potential and capability (see NRCS Riparian Assessment form for definitions). Is it reasonable to remove a dam? What is the "capability" of the wetland when a dam or road are not removed.